

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1-4. (Canceled)

5. (Currently amended) ~~The separator according to claim 1,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of
the separator base material in a region of the separator associated with electrical
contact resistance between the separator and an adjacent member of the fuel cell when
the separator is brought into contact with the adjacent member when the separator is
integrated into the fuel cell,

wherein the metal coating layer comprises crystal grains having an average grain
size of 0.1 mm or more, resulting from melting and gradual cooling of the coating layer
on the separator base material, and

wherein the metal coating layer formed from the metal contains a substance
added to the metal which reduces a melting point of the metal when added to the metal.

6. (Currently amended) ~~The separator according to claim 1,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of
the separator base material in a region of the separator associated with electrical
contact resistance between the separator and an adjacent member of the fuel cell when

the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer comprises crystal grains having an average grain size of 0.1 mm or more, resulting from melting and gradual cooling of the coating layer on the separator base material, and

wherein the metal is tin or a tin alloy.

7. (Currently amended) ~~The separator according to claim 1,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator associated with electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer comprises crystal grains having an average grain size of 0.1 mm or more, resulting from melting and gradual cooling of the coating layer on the separator base material, and

wherein the metal is a tin alloy having a lower melting point than that of tin.

8-9. (Canceled)

10. (Currently amended) ~~The separator according to claim 1,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator associated with electrical contact resistance between the separator and an adjacent member of the fuel cell when

the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer comprises crystal grains having an average grain size of 0.1 mm or more, resulting from melting and gradual cooling of the coating layer on the separator base material, and

wherein the metal coating layer has a corrosion-resistant coating layer formed on the surface of the metal coating layer, the corrosion-resistant coating layer being formed from a corrosion resistant, electrically conductive substance.

11. (Currently amended) ~~The separator according to claim 1,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator associated with electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer comprises crystal grains having an average grain size of 0.1 mm or more, resulting from melting and gradual cooling of the coating layer on the separator base material, and

further comprising a carbon coating layer of a carbon material formed at least on the region of the separator base material where the metal coating layer is formed.

12-16. (Canceled)

17. (Currently amended) ~~The separator according to claim 13,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path,
comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more, and

wherein the metal coating layer formed from the metal contains a substance added to the metal which reduces a melting point of the metal when added to the metal.

18. (Currently amended) ~~The separator according to claim 13,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more, and

wherein the metal is tin or a tin alloy.

19. (Currently amended) ~~The separator according to claim 13,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the

fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more, and

wherein the metal is a tin alloy having a lower melting point than that of tin.

20-21. (Canceled)

22. (Currently amended) ~~The separator according to claim 13,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more, and

wherein the metal coating layer has a corrosion-resistant coating layer formed on the surface of the metal coating layer, the corrosion-resistant coating layer being formed from a corrosion resistant, electrically conductive substance.

23. (Currently amended) ~~The separator according to claim 13,~~

A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the

fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more, and

further comprising a carbon coating layer of a carbon material formed at least on the region of the separator base material where the metal coating layer is formed.

24 - 46. (Canceled)